

GA Joint Steering Committee

Evolving GA Safety to a Data-Driven Proactive Process

Presented to: NTSB GA Safety Forum

By: Tony Fazio, Director of the Office of Accident Investigation & Prevention

Date: June 19th, 2012

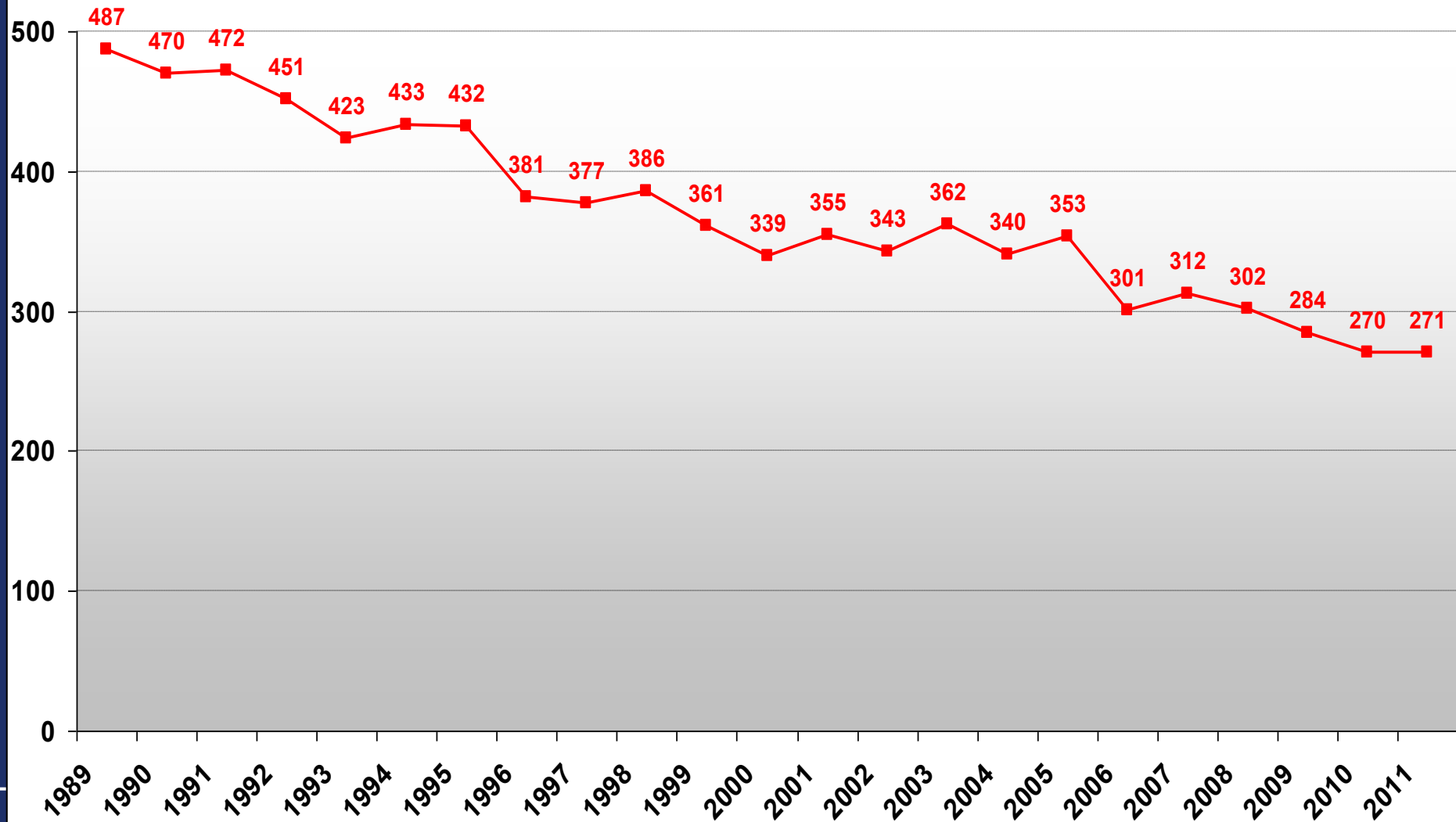


Federal Aviation
Administration



GENERAL AVIATION FATAL ACCIDENTS

(General Aviation includes General Aviation and Unscheduled Part 135)



GA Joint Steering Committee

- Evolve GA JSC to a CAST like Model
 - *Voluntary commitments*
 - *Consensus decision-making*
 - *Data driven risk management*
 - *Implementation-focused*
- The GA JSC is a means to...
 - Focus Limited Government/Industry Resources to Data Driven Risks and Solutions*



General Aviation Joint Steering Committee (GAJSC)

Steering Committee

Co-Chairs: Bruce Landsberg (AOPA/ASF)

Tony Fazio (FAA/AVP)

Government - FAA (AFS, AIR, ATO & ARP)

- NASA (Research)

- NWS

Industry

- GAMA, EAA, NBAA, NATA,
& SAMA

- Strategic guidance
- Management/Approval of Safety Plan
- Provide direction
- Membership Outreach
- Provides linkage to ASIAs

Safety Analysis Team

Co-chairs: Corey Stephens (FAA)

Jens Hennig (GAMA)

Members: FAA, NTSB, AOPA, FSF, UAA, CGAR,
FAST, NAFL, Insurance, Academia, SAFE

- Identify future areas of study/risk
- Charter safety studies
- Provide guidance and direction
- Draw data from various areas
- Develop a prioritized Safety Plan
- Develop metrics to measure effectiveness of safety solutions

Working Groups

(To include SMEs from various general aviation segments, depending on study)

- Data analyses
- Safety enhancement
- Mitigation development

What is the GA JSC Dataset & the GA Pareto?

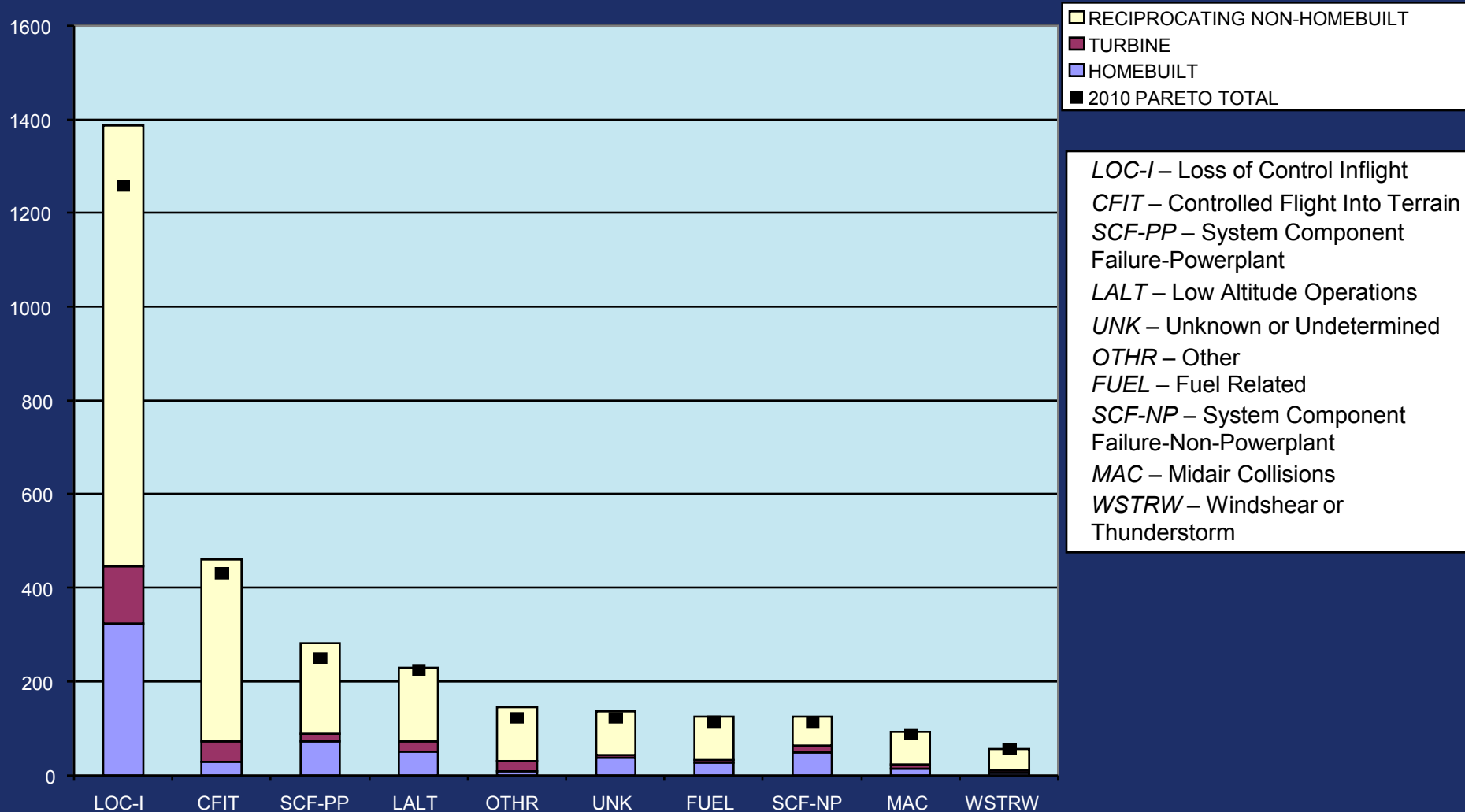
- **GAJSC Accident Data Set Requirements**
 - Report Status: **Final**
 - Highest Degree Injury: **Fatal**
 - Event Type: **Accident**
 - Aircraft Type: **Airplane**
 - Flight Conduct Codes:
 - Part 91
 - Part 135, Unscheduled
 - Part 137
 - Public Use
 - Unknown



GAJSC Pareto CY2001-CY2011

Source: NTSB Aviation Accident/Incident Database.

Note: 66% and 5% of fatal accidents have been finalized for 2010 and 2011 respectively



GA JSC Working Group (WG) Process

- WGs to be formed based on risk (example: Loss of Control - LOC)
- Broad-based teams (20-30 specialists /team)
- Teams can be divided by aircraft or operation type (example: turbine, reciprocating and homebuilt reciprocating/turbine)
- Detailed event sequence - problem identification from US accidents and incidents



GA JSC Working Group Process

- WGs to develop mitigations based on problems found and build Detailed Implementations Plans (DIPs)
 - DIPs will describe each mitigation and explain steps to implementation
 - Groups are identified for leadership and metrics are developed
 - DIPs then go to the SAT for resource/benefit evaluation



GA JSC SAT Process

- SAT identifies the most effective solutions derived from all accident categories
 - Considers effectiveness vs. resources
 - Tests solutions against other fatal accidents
- Creates draft master strategic safety plan
- Plan is submitted to GA JSC for approval



GA JSC SAT Process

- Once plan is approved, **industry and government begin implementation**
- SAT will track implementation schedules and levels (are mitigations on time and at levels we were expecting)
- SAT will work to track effectiveness of the mitigations in place
- SAT will identify and recommend areas for future study/mitigation



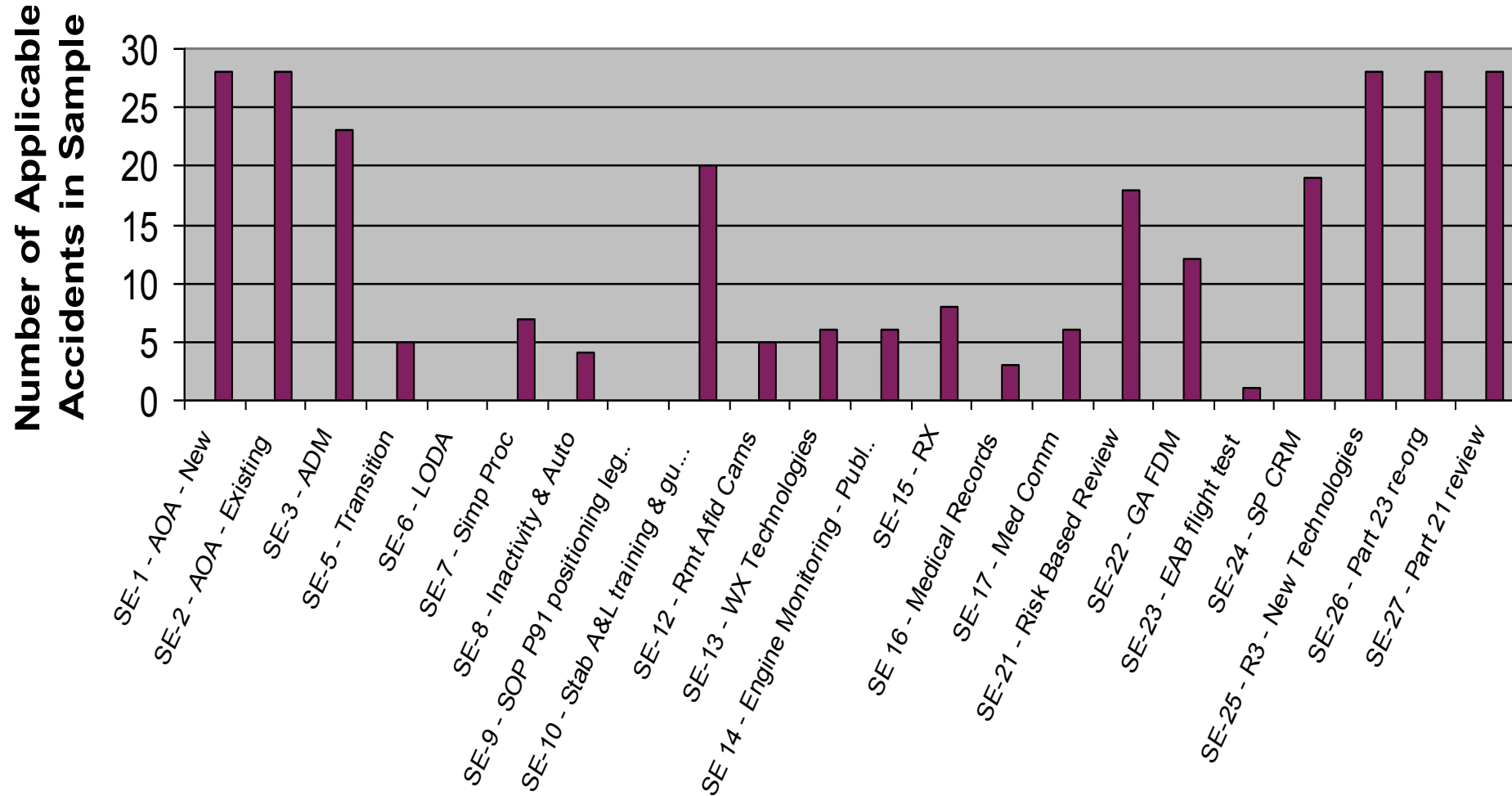
GA JSC Approved Safety Enhancements

- SE-1 - AOA – New Designs
- SE-2 - AOA – Existing Fleet
- SE-3 - ADM
- SE-5 - Transition Training
- SE-6 - LODA
- SE-7 - Simple Procedures
- SE-8 - Training
- SE-9 - SOP Pt91 positioning legs, FRAT & SMS
- SE-10 - Stab App & Landing Training & Guidance
- SE-12 - Remote Airfield Cameras
- SE-13 - WX Technologies
- SE 14 - Engine Monitoring
- SE-15 - RX Medication Effects
- SE 16 - Medical Records
- SE-17 - Improve Communication between AMEs and Pilots
- SE-21 - Risk Based Review
- SE-22 - GA FOQA
- SE-23 - EAB Flight Test
- SE-24 - Single Pilot CRM
- SE-25 - Reducing Regulatory Roadblocks for New Technologies
- SE-26 - Part 23 Re-org
- SE-27 - Part 21 Review



LOC WG Approach & Landing SEs

Total Count by Accident



Two Paths Toward Improving Safety...



- Accident Investigation
- Historical Accident Analysis/Review

GA Safety



- Quality Assurance
- Pilot Reporting
- SMS

Questions?

